

OMB Approval No. 2700-0087

OFFICE OF SPACE SCIENCE (OSS)  
EDUCATION AND OUTREACH BROKER/FACILITATOR PROGRAM  
- 1997 -

NASA Research Announcement  
Soliciting Space Science Education Proposals  
Submitted On Or Before  
July 10, 1997

NRA 97-OSS-07

Release Date: April 11, 1997  
Notice of Intent to Propose Due: May 12, 1997  
Proposal Submission Deadline: July 10, 1997

Office of Space Science  
National Aeronautics and Space Administration  
Washington, DC 20546-0001

**OFFICE OF SPACE SCIENCE (OSS)**  
**EDUCATION AND OUTREACH BROKER/FACILITATOR**  
**PROGRAM**  
**- 1997 -**

NASA's Office of Space Science (OSS) announces an opportunity for proposing concepts/approaches for carrying out the Education Broker/Facilitator role outlined in the OSS Education/Outreach Implementation Plan (see Appendix A). The establishment of a set of Education Brokers/Facilitators is a central element of the broad OSS approach to implementing a comprehensive Space Science Education and Public Outreach program.

The OSS Education/Outreach Strategy and the follow-on Education/Outreach Implementation Plan have been developed in collaboration with the Office of Human Resources and Education and the Office of Equal Opportunity Programs. They describe OSS's approach to contributing to NASA's overall commitment to improving education and the public understanding of science. They are aimed at fulfilling the mandates in the NASA Strategic Plan to involve the education communities in our endeavors to inspire America's students, create learning opportunities, enlighten inquisitive minds, and communicate widely the content, relevancy, and excitement of NASA's missions and discoveries to inspire and increase understanding and the broad application of science and technology. They are aimed at expanding the impact of NASA's education/outreach programs by encouraging and facilitating the development of partnerships between the space science and education communities and by providing meaningful opportunities for underserved and underutilized groups.

The goal of the Education and Outreach Broker/Facilitator Program is to undertake, explore, and critically examine a variety of approaches to helping Space Scientists become involved in effective education and outreach activities. This program will create a set of regional Brokers/Facilitators whose primary functions will be to search out high leverage opportunities, arrange alliances between educators and scientists, help scientists turn results from space science missions and programs into educationally appropriate products and/or services, and arrange for the results from such education and outreach activities to be disseminated regionally or nationally. Subject to the submission of qualified proposals, NASA intends to select 4 to 6 proposals to be typically funded in the range of \$175K to \$250K per year for up to 3 years, although proposals outside this range will also be considered if a compelling case can be made by the proposer for a significant departure from these funding levels.

Since the Broker/Facilitator concept is a new one whose effectiveness is to be tested by trying out a variety of approaches to carrying out the role, NASA plans to select proposals with diverse approaches to implementing the Broker/Facilitator concept and to evaluate the effectiveness of such diverse implementation approaches over the three year award period. Since the intent of the Broker/Facilitator approach is to make these services available to scientists and educators in all parts of the country, geographic distribution will also be explicitly considered in the selection process. It is anticipated that awards will normally be made as cooperative agreements, since considerable interaction with NASA/OSS will be required. However, other appropriate funding mechanisms may also be used. Selected proposers will have to work closely with NASA, with each other, and with other institutions (such as the Education Forums described in the OSS Education/Outreach Implementation Plan) in carrying out their responsibilities.

Individual institutions or consortiums of institutions are welcome and encouraged to propose. All categories of organizations may propose, including educational institutions, profit and nonprofit institutions, NASA Centers, and other Government agencies.

The Government's obligation to make awards under this NRA is contingent upon the availability of appropriated funds, as well as the receipt of proposals that the Government determines are acceptable for award. Further information about this program is contained in the Appendices:

- A. Description of the Broker/Facilitator Program;
- B. Instructions for Responding to NASA Research Announcements; and
- C. Proposal Prefatory Material.

This NRA may be accessed through the "Research Opportunities" heading on the menu of the Office of Space Science World Wide Web homepage at <<http://www.hq.nasa.gov/office/oss>>. Individuals not having access to the Internet may telephone Ms. Jean Magnotto at 202-358-2470 ( e-mail: <[jean.magnotto@hq.nasa.gov](mailto:jean.magnotto@hq.nasa.gov)>) in order to request a printed copy.

The following summary information applies to this NRA:

Program announcement identifier: NRA 97-OSS-07

Date of issue: April 11, 1997

Deadline for Notice of Intent to propose: May 12, 1997

Deadline for submission of proposal: July 10, 1997, 4:30 PM EDT

Anticipated announcement of selections: September 1997

Anticipated initiation of new awards: October/November 1997

Required number of proposal copies: Signed original, plus 10 copies

Address for submission of both Notices of Intent and proposals by U.S. Postal Service, private courier, or commercial express mail:

OSS Education and Outreach Broker/Facilitator Program  
Jorge Scientific Corporation  
Suite 700  
400 Virginia Avenue, SW  
Washington, DC 20024  
(202-554-2775)

Contact for additional information:

Mr. Steven Brody  
Mission and Payload Development Division  
Code SD  
NASA Headquarters  
Washington, DC 20546-0001

Phone: (202) 358-0889  
Facsimile: (202) 358-3987  
E-mail: steven.brody@hq.nasa.gov

Selecting official:

Assistant Associate Administrator for Education and Outreach  
Office of Space Science.

While NASA attempts to ensure that its program announcements are mailed to the broadest possible distribution of interested parties, this one for the Broker/Facilitator Program may not reach everyone who may be interested. Therefore, we request that you alert any of your colleagues, whether in your institution or in others, that may be potentially interested in this program announcement.

Your interest in applying to this program is sincerely solicited and appreciated.

Wesley T. Huntress, Jr.  
Associate Administrator  
for Space Science

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## **OSS EDUCATION AND OUTREACH BROKER/FACILITATOR PROGRAM**

### 1. PROGRAM DESCRIPTION

This program has been created in direct response to the recommendations contained in the Office of Space Science (OSS) Education/Outreach Implementation Plan (see below). The objective of the program is to establish a set of regional Education Brokers/Facilitators who will assist space scientists in becoming effectively involved in Space Science Education and Outreach activities through the identification of appropriate opportunities and the creation of suitable partnerships between the space science and education communities. These Brokers/Facilitators will expedite, assist, serve as catalysts, and simplify the process of channeling the expertise of the space science community into directions that will benefit the educational process and contribute to the public understanding of space science. The Brokers/Facilitators will be expected to provide a wide range of functions, examples of which include (but are not necessarily limited to):

- Developing a thorough understanding of NASA's total Education Program in order to ensure that new activities and new initiatives link to, are coordinated with, and support the Agency's overall education effort;
- Assisting the scientific community in identifying and formulating highly-leveraged education/outreach projects and programs that integrate NASA resources and the results from NASA's space science programs into such activities as workshops, curricula, on-line activities, museum exhibits, and planetarium programs;

- Assisting in identifying potential partners and creating appropriate partnerships within specific geographical regions;
- Organizing training workshops for scientists;
- Assisting educators and educational organizations in interfacing with scientists participating in OSS research programs and missions and in locating NASA and other space science related educational materials;
- Orchestrating the implementation of educational product creation, evaluation, and use throughout local, state, and regional areas;
- Assisting with placing educational materials into regional and national archives and NASA Education and/or other distribution networks;
- Promoting participation by the space science community in local, rural, urban, and state systemic initiatives.

*Partners in Education: A Strategy for Integrating Education and Public Outreach Into NASA's Space Science Programs* dated March 1995 describes the Office of Space Science's approach for making education at all levels and the enhancement of the public understanding of science integral parts of space science research activities. Education and public outreach are now expected to be part of each flight program and research discipline. The follow-on implementation plan, entitled *Implementing the Office of Space Science (OSS) Education/Public Outreach Strategy*, dated October 15, 1996, describes the overall approach being taken by OSS to implement this Strategy and the particular role to be played by the Brokers/Facilitators in more detail. Copies of these documents may be obtained by opening "Publications" on the OSS homepage at <<http://www.hq.nasa.gov/office/oss/>> or from Ms. Jean Magnotto, Office of Space Science, Code S, NASA Headquarters, Washington, DC 20546-0001, 202-358-2470; E-mail: <[jean.magnotto@hq.nasa.gov](mailto:jean.magnotto@hq.nasa.gov)>.

As noted in the Education/Outreach Implementation Plan, "It is the view of the Task Force that the Broker/Facilitator concept is central to the systems approach being recommended for the implementation of the OSS Education/Outreach Strategy. The job is going to be a difficult and demanding one requiring familiarity with the OSS program and the scientific community, familiarity with the needs of the education community, links to the education system at many levels, and an aggressive approach to identifying high leverage opportunities and arranging alliances."

Proposals selected through this NRA are expected, in most cases, to result in Cooperative Agreements with the proposing institutions. However, other appropriate funding mechanisms may also be used. Information on Cooperative Agreements with NASA can be found in the Grant and Cooperative Agreement Handbook (NPG 5800.1D dated July 23, 1996). Sections A and B of NPG 5800.1D address cooperative agreements with institutions of higher learning and other nonprofit organizations. Section D addresses cooperative agreements with commercial firms. This publication may be accessed at <<http://procure.msfc.nasa.gov/grcover.htm>>.

Incremental funding is expected on an annual basis for this multiyear program. Such funding will be based upon availability of funds and successful performance to be demonstrated through the submission each year of an annual report demonstrating satisfactory progress and an associated budget for the following year. Short midterm reports will also be required during each year of the award period. In addition, the Principal Investigators (PI's) of the selected proposals will be expected to attend up to 4 meetings per year (usually in Washington) throughout the award period to share their experiences and accomplishments as a group with each other, the OSS Assistant Associate Administrator for Education and Outreach, and representatives from NASA's Education and Minority University Research and Education Divisions, as well as other organizations involved in the implementation of the OSS Education/Outreach program. Such meetings will include participation in the Office of Space

Science Education Council, which will be established in early 1998. Travel costs to support these activities should be included in the proposal. At the end of the 3-year period, the effectiveness of the Broker/Facilitator concept will be evaluated. If a decision is made to continue with this program, all decisions regarding subsequent participation will be made on the basis of a new competition.

## 2. RESPONSIBILITIES OF PARTIES

For proposals selected for this Broker/Facilitator Program, proposers must demonstrate that (i) the necessary capabilities for conducting the proposed Broker/Facilitator activities exist in their own facilities or at those of collaborating institutions (that may include educational institutions, profit and nonprofit organizations, NASA centers, and other Government agencies) cited in the proposal; and (ii) the proposed effort will be led by a single Principal Investigator (PI), who has overall responsibility for the program. There is no limit on the number of Co-Investigators (Co-I's) from the lead or collaborating institutions, but each Co-I should have distinct, well-defined responsibilities which are to be specified in each proposal.

Terms of any Cooperative Agreements resulting from a selection made under this NRA will be negotiated as part of the award process. At a minimum, NASA's responsibilities will include arranging, coordinating, and supporting the meetings described in Sections 1 and 3.4.

## 3. PROPOSAL PREPARATION, EVALUATION, AND SELECTION PROCEDURES

Appendix B contains standard NASA instructions for preparation and submission of solicited research proposals. It should be carefully read and followed, except as amended and extended by the provisions in this Section.

### 3.1 Notice of Intent (NOI) and Response to Questions

In order to anticipate the size of and plan the needed evaluation effort, institutions interested in this OSS Education Broker/Facilitator Program are asked to submit a Notice of Intent (NOI) to propose following the format given in Appendix C. To the extent known at the time of its submission, the NOI should briefly describe the approach likely to be proposed, identify a single Principal Investigator and his/her institution, identify likely collaborating institutions and Co-Investigators (if known), and be signed by an official of the PI's institution authorized to commit resources. NOI's should be submitted as described in the Cover Letter.

Answers to all questions concerning this Research Announcement (with identifying information concerning the questioner removed) will be posted and may be accessed through the "Research Opportunities" heading on the menu of the Office of Space Science World Wide Web homepage at <<http://www.hq.nasa.gov/office/oss/>>. Questions and answers will be posted on the Web following the text of this NRA at the end of each week during the proposal preparation period. Prospective proposers are advised to check this site for new postings.

### 3.2 Proposal Contents and Format Information

In order to facilitate recycling, proposals should be on white paper with a minimum of color inserts and bound in a manner that facilitates easy disassembly. The original plus 10 copies of the proposal are to be submitted according to the instructions given in Appendix B. Late proposals will be accepted in accordance with Section 11 of Appendix B. To ensure a thorough evaluation, a proposal should include the following items in the order given:

- **Proposal Cover Sheet** (format in Appendix C).
- **Proposal Summary** (format in Appendix C; may also serve in lieu of an abstract for the proposal ).
- **Proposal Budget Summary** (format in Appendix C).
- **Current and Pending Research Support** (format in Appendix C).
- Pursuant to Federal legislation for non-Government proposing institutions, **Certifications for Debarment and Suspension, Drug Free Workplace, and Lobbying** (sample forms in Appendix C; need only be submitted with the original, signed copy of the proposal).
- **Main body of the proposal** that addresses the selection criteria noted in Section 3.3 below using not more than 15 pages of standard-sized text and illustrations, where each side of a sheet containing text or figures is considered a page (the prefatory materials in Appendix C, a Table of Contents, and the personnel and budget materials noted below are not included in this page limit). Electronic format materials of any kind are not to be submitted.
- **Summary of Personnel** composed of one page curriculum vitae for the Principal Investigator and each Co-Investigator, whether from the PI or from other Co-I institutions.
- **Detailed budget** (in the format used by the lead proposing institution) that clearly describes the use of NASA funds requested through this solicitation. Any such budget must be summarized in the Proposal Budget Summary noted above. A summary of the sources and amounts of all additional non-NASA funds being sought for the proposed effort also should be provided.

### 3.3 Criteria for Selection (this section entirely replaces Section 13 of Appendix B)

Proposals submitted in response to this NASA Research Announcement will be judged on the following factors:

- The proposer's understanding of and approach to carrying out the role of the Broker/Facilitator;
- The scope and likely effectiveness of the proposed approach for carrying out that role and the innovativeness of that approach;
- The capabilities, experience, and qualifications of the proposer(s) and their institution(s) for assuming the Broker/Facilitator role;
- Demonstrated and/or proposed strong linkages to the education and space science communities;
- Prospects for leveraging resources through alliances and collaborations with other institutions and organizations;
- Soundness of the proposed management approach and realism of the requested resources for carrying out the work.



As indicated in the Cover Letter, geographic coverage and the goal of experimenting with a variety of approaches undertaken by a variety of types of organizations to carrying out the Broker/Facilitator role are also factors that will be explicitly considered in the final selection of proposals.

In order to ensure an equitable and thorough evaluation process, proposers are asked to organize their proposals to address these factors as follows, each of which will have equal weight for purposes of proposal review and evaluation.

- Role of Brokers/Facilitators. The proposer's overall understanding of the functions to be performed by the Broker/Facilitator and approach to carrying out those functions should be clearly and fully described. The target audiences, services to be provided, and other activities to be undertaken by the Brokers/Facilitators should be identified and described. The specific geographic region to benefit from this activity should also be identified.
  - Scope, Effectiveness, and Innovativeness of the Proposed Approach. Proposed methods for accomplishing the Broker/Facilitator role and for carrying out the work should be described and any unique/innovative aspects of the proposed approach should be specifically identified. Proposed collaborative activities with NASA should be identified. Specific approaches for establishing linkages with and supporting the education agendas of individual states should be outlined. A discussion should be included describing infrastructure and facilities to be used to accomplish the Broker/Facilitator role and approaches for meeting the regional responsibilities to be assumed by the Broker/Facilitator. The proposal should also discuss plans for evaluating the progress and effectiveness of the proposed approach for implementing the Broker/Facilitator role.
  - Capabilities, Experience, and Qualifications. The proposal should address those aspects of the proposer's capabilities, previous experience, background, and qualifications that are most relevant to successfully assuming the responsibilities of a Broker/Facilitator. Specific experience and accomplishments in establishing alliances between scientists and educators, and developing and implementing formal and informal science education programs, particularly at the state, regional, or national level, should be described.
  - Links to Education and Space Science Communities. The proposer should describe their specific existing or proposed links to both the education and space science communities and how those linkages will be used in implementing the proposed Broker/Facilitator role. Existing or proposed linkages to local, rural, urban, or state systemic initiatives should be specifically discussed.
  - Prospects for Leveraging Resources. The proposal should describe existing or potential alliances and collaborations with other groups, institutions, and organizations (including NASA) that could extend and amplify the proposer's effectiveness and ability to assume the role of a Broker/Facilitator. Any cost-sharing arrangements or other possible financial and/or in-kind contributions from other sources which could be used to enhance the effort to be undertaken with OSS support should be specifically identified.
  - Management Approach and Resource Requirements. The proposal should cover the proposed project organization structure, including how the diverse resources from multiple departments within the lead institution and/or from within other consortium institutions will be coordinated and utilized, a plan of the time schedule of activities to be followed in carrying out the proposed effort, and the project financial plan for carrying out the proposed work, including resources requested from NASA and other resources that may also be available for implementing the proposed effort.
- A Management/Project Plan should demonstrate assignment of responsibilities through an organizational structure that provides assurance that the proposed effort can be carried through to completion and should demonstrate that the end-to-end scope of

the proposed effort is recognized and that ample time is allowed for achieving each step.

- A Budget Plan may request funding from NASA/OSS for a period up to 3 years. The proposal must explicitly demonstrate that the proposed work can actually be done using available and/or requested resources. As noted in the Cover Letter, anticipated awards are in the range \$175-250K per year, although awards outside this range will also be considered in exceptional cases. Regardless of whether NASA funding is requested or not, the Budget Plan should demonstrate how all goods and services involved in the proposal are to be obtained, especially those items for which requested NASA/OSS funds are to be used. This plan should identify all resources and sources of funding to be used to support the work, including specific grant funds, cost sharing arrangements with other institutions, no-cost contributions, and any other known or potential commitment of resources. If the proposed approach includes activities directly applicable to the Broker/Facilitator Program that are currently funded from another NASA program (e.g., the NASA Space Grant Program), this source of support should be identified in the program as a contributing resource. It is the obligation of the proposer, in such a case, to fully inform, and coordinate with, the appropriate NASA program manager(s) or technical monitor(s) of the currently funded activities regarding their additional intended uses in support of the OSS Education and Outreach Broker/Facilitator Program.

-NASA funds may be used for any valid expenses related to the Broker/Facilitator function, e.g., procurement of hardware or services needed to complete the activity and travel expenses necessary for supporting the Broker/Facilitator function. In any case, the use of NASA-requested funds must be summarized on the Proposal Budget Summary form provided in Appendix C.

### 3.4 Proposal Evaluation, Selection, and Program Initiation

The merits of each proposal, based upon the selection criteria given in Section 3.3, will be evaluated by a review panel composed of personnel from the NASA Headquarters Office of Space Science (OSS), other appropriate NASA Headquarters Offices, and from the education and space science communities. The strengths and weaknesses will be presented in summary form to the designated Selecting Official, who will make the final selections.

Notification of selection decisions will be made according to the schedule contained in the Cover Letter. Debriefings by telephone of all nonselected proposers will be provided on request within approximately four weeks following announcement of selections. Selected proposers will be invited to a program initiation meeting at NASA Headquarters to be held one to two months after notification; the selectees will be informed in advance of the format of the meeting and information they will need to provide.

## 4. SPECIAL INSTRUCTIONS FOR NON-U.S. PROPOSALS

NASA welcomes proposals from outside the U.S. However, investigators working outside the U.S. are not eligible for funding from NASA. Proposals from non-U.S. entities should not include a cost plan. Proposals from outside the U.S. and U.S. proposals that include non-U.S. participation, must be endorsed by the respective government agency or funding/sponsoring institution in that country from which the non-U. S. participant is proposing. Such endorsement should indicate that the proposal merits careful consideration by NASA, and if the proposal is selected, sufficient funds will be made available to undertake the activity as proposed.

In addition to sending the required number of copies of the proposals to the designated address, one copy of the proposal, along with a Letter of Endorsement from the sponsoring non-U.S. agency, must be forwarded to:

Ms. Bettye Jones  
(NRA 97-OSS-07)  
International Science and Aeronautics Division  
Code IS  
NASA Headquarters  
Washington, DC 20546-0001  
USA

All proposals must be typewritten in English. All non-U.S. proposals will undergo the same evaluation and selection process as those originating in the U.S. All proposals must be received before the established closing date; those received after the closing date will be held for the next proposal cycle. Sponsoring non-U.S. agencies may, in exceptional situations, forward a proposal without endorsement to the above address if endorsement is not possible before the announced closing date. In such cases, however, NASA's International Science and Aeronautics Division should be advised when a decision on endorsement can be expected.

Successful and unsuccessful proposers will be contacted directly by the Office of Space Science. Should a non-U.S. proposal or a U.S. proposal with non-U.S. participation be selected, NASA's International Science and Aeronautics Division will arrange with the non-U.S. sponsoring agency for the proposed participation on a no-exchange-of-funds basis, in which NASA and the non-U.S. sponsoring agency will each bear the cost of discharging their respective responsibilities. Depending on the nature and extent of the proposed cooperation, these arrangements may entail:

1. a letter of notification by NASA; and
2. an exchange of letters between NASA and the sponsoring governmental agency, or
3. a formal Agency-to-Agency Memorandum of Understanding (MOU).

# **INSTRUCTIONS FOR RESPONDING TO NASA RESEARCH ANNOUNCEMENTS**

**(JUNE 1995)**

## **1. Foreword**

a. These instructions apply to "NASA Research Announcements." The "NASA Research Announcement (NRA)" permits competitive selection of research projects in accordance with statute while preserving the traditional concepts and understandings associated with NASA sponsorship of research.

b. These instructions are Appendix I to 1870.203 of the NASA Federal Acquisition Regulation Supplement.

## **2. Policy**

a. Proposals received in response to an NRA will be used only for evaluation purposes. NASA does not allow a proposal, the contents of which are not available without restriction from another source, or any unique ideas submitted in response to an NRA to be used as the basis of a solicitation or in negotiation with other organizations, nor is a pre-award synopsis published for individual proposals.

b. A solicited proposal that results in a NASA award becomes part of the record of that transaction and may be available to the public on specific request; however, information or material that NASA and the awardee mutually agree to be of a privileged nature will be held in confidence to the extent permitted by law, including the Freedom of Information Act.

## **3. Purpose**

These instructions supplement documents identified as "NASA Research Announcements." The NRAs contain programmatic information and certain requirements which apply only to proposals prepared in response to that particular announcement. These instructions contain the general proposal preparation information which applies to responses to all NRAs.

## **4. Relationship to Award**

a. A contract, grant, cooperative agreement, or other agreement may be used to accomplish an effort funded in response to an NRA. NASA will determine the appropriate instrument.

b. Grants are generally used to fund basic research in educational and nonprofit institutions, while research in other private sector organizations is accomplished under contract. Contracts resulting from NRAs are subject to the Federal Acquisition Regulation and the NASA FAR Supplement (NHB 5100.4). Any resultant grants or cooperative agreements will be awarded and administered in accordance with the NASA Grant and Cooperative Agreement Handbook (NPG 5800.1D).

## **5. Conformance to Guidance**

a. NASA does not have mandatory forms or formats for responses to NRAs; however, it is requested that proposals conform to the guidelines in these instructions. NASA may accept proposals without discussion; hence, proposals should initially be as complete as possible and be submitted on the proposers' most favorable terms.

b. To be considered responsive, a submission must, at a minimum, present a specific project within the areas delineated by the NRA; contain sufficient technical and cost information to permit a meaningful evaluation; be signed by an official authorized to legally bind the submitting organization; not merely offer to perform standard services or to just provide computer facilities or services; and not significantly duplicate a more specific current or pending NASA solicitation.

## **6. NRA-Specific Items**

Several proposal submission items appear in the NRA itself: the unique NRA identifier; when to submit proposals; where to send proposals; number of copies required; and sources for more information. Items included in these instructions may be supplemented by the NRA.

## **7. Proposal Contents**

a. The following information is needed to permit consideration in an objective manner. NRAs will generally specify topics for which additional information or greater detail is desirable. Each proposal copy shall contain all submitted material, including a copy of the transmittal letter if it contains substantive information.

**b. Transmittal Letter or Prefatory Material.** (1) The legal name and address of the organization and specific division or campus identification if part of a larger organization;

(2) A brief, scientifically valid project title intelligible to a scientifically literate reader and suitable for use in the public press;

(3) Type of organization: e.g., profit, nonprofit, educational, small business, minority, women-owned, etc.;

(4) Name and telephone number of the principal investigator and business personnel who may be contacted during evaluation or negotiation;

(5) Identification of other organizations that are currently evaluating a proposal for the same efforts;

(6) Identification of the NRA, by number and title, to which the proposal is responding;

(7) Dollar amount requested, desired starting date, and duration of project;

(8) Date of submission; and

(9) Signature of a responsible official or authorized representative of the organization, or any other person authorized to legally bind the organization (unless the signature appears on the proposal itself).

**c. Restriction on Use and Disclosure of Proposal Information.** Information contained in proposals is used for evaluation purposes only. Offerors or quoters should, in order to maximize protection of trade secrets or other information that is confidential or privileged, place the following notice on the title page of the proposal and specify the information subject to the notice by inserting appropriate identification, such as page numbers, in the notice. In any event, information contained in proposals will be protected to the extent permitted by law, but NASA assumes no liability for use and disclosure of information not made subject to the notice.

### **Notice**

#### **Restriction on Use and Disclosure of Proposal Information.**

The information (data) contained in [insert page numbers or other identification] of this proposal constitutes a trade secret and/or information that is commercial or financial and confidential or privileged. It is furnished to the Government in confidence with the understanding that it will not, without permission of the offeror, be used or disclosed other than for evaluation purposes; provided, however, that in the event a contract (or other agreement) is awarded on the basis of this proposal the Government shall have the right to use and disclose this information (data) to the extent provided in the contract (or other agreement). This restriction does not limit the Government's right to use or disclose this information (data) if obtained from another source without restriction.

d. **Abstract.** Include a concise (200-300 word if not otherwise specified in the NRA) abstract describing the objective and the method of approach.

e. **Project Description.** (1) The main body of the proposal shall be a detailed statement of the work to be undertaken and should include objectives and expected significance; relation to the present state of knowledge; and relation to previous work done on the project and to related work in progress elsewhere. The statement should outline the plan of work, including the broad design of experiments to be undertaken and a description of experimental methods and procedures. The project description should address the evaluation factors in these instructions and any specific factors in the NRA. Any substantial collaboration with individuals not referred to in the budget or use of consultants should be described. Subcontracting significant portions of a research project is discouraged.

(2) When it is expected that the effort will require more than one year, the proposal should cover the complete project to the extent that it can be reasonably anticipated. Principal emphasis should be on the first year of work, and the description should distinguish clearly between the first year's work and work planned for subsequent years.

f. **Management Approach.** For large or complex efforts involving interactions among numerous individuals or other organizations, plans for distribution of responsibilities and arrangements for ensuring a coordinated effort should be described. Intensive working relations with NASA field centers that are not logical inclusions elsewhere in the proposal should be described.

g. **Personnel.** The principal investigator is responsible for supervision of the work and participates in the conduct of the research regardless of whether or not compensated under the award. A short biographical sketch of the principal investigator, a list of principal publications and any exceptional qualifications should be included. Omit social security number and other personal items which do not merit consideration in evaluation of the proposal. Give similar biographical information on other senior professional personnel who will be directly associated with the project. Give the names and titles of any other scientists and technical personnel associated substantially with the project in an advisory capacity. Universities should list the approximate number of students or other assistants, together with information as to their level of academic attainment. Any special industry-university cooperative arrangements should be described.

h. **Facilities and Equipment.** (1) Describe available facilities and major items of equipment especially adapted or suited to the proposed project, and any additional major equipment that will be required. Identify any Government-owned facilities, industrial plant equipment, or special tooling that are proposed for use.

(2) Before requesting a major item of capital equipment, the proposer should determine if sharing or loan of equipment already within the organization is a feasible alternative. Where such arrangements cannot be made, the proposal should so state. The need for items that typically can be used for research and non-research purposes should be explained.

i. **Proposed Costs.** (1) Proposals should contain cost and technical parts in one volume: do not use separate "confidential" salary pages. As applicable, include separate cost estimates for salaries and wages; fringe benefits; equipment; expendable materials and supplies; services;

domestic and foreign travel; ADP expenses; publication or page charges; consultants; subcontracts; other miscellaneous identifiable direct costs; and indirect costs. List salaries and wages in appropriate organizational categories (e.g., principal investigator, other scientific and engineering professionals, graduate students, research assistants, and technicians and other non-professional personnel). Estimate all manpower data in terms of man-months or fractions of full-time.

(2) Explanatory notes should accompany the cost proposal to provide identification and estimated cost of major capital equipment items to be acquired; purpose and estimated number and lengths of trips planned; basis for indirect cost computation (including date of most recent negotiation and cognizant agency); and clarification of other items in the cost proposal that are not self-evident. List estimated expenses as yearly requirements by major work phases. (Standard Form 1411 may be used).

(3) Allowable costs are governed by FAR Part 31 and the NASA FAR Supplement Part 1831 (and OMB Circulars A-21 for educational institutions and A-122 for nonprofit organizations).

j. **Security.** Proposals should not contain security classified material. If the research requires access to or may generate security classified information, the submitter will be required to comply with Government security regulations.

k. **Current Support.** For other current projects being conducted by the principal investigator, provide title of project, sponsoring agency, and ending date.

l. **Special Matters.** (1) Include any required statements of environmental impact of the research, human subject or animal care provisions, conflict of interest, or on such other topics as may be required by the nature of the effort and current statutes, executive orders, or other current Government-wide guidelines.

(2) Proposers should include a brief description of the organization, its facilities, and previous work experience in the field of the proposal. Identify the cognizant Government audit agency, inspection agency, and administrative contracting officer, when applicable.

## **8. Renewal Proposals**

a. Renewal proposals for existing awards will be considered in the same manner as proposals for new endeavors. A renewal proposal should not repeat all of the information that was in the original proposal. The renewal proposal should refer to its predecessor, update the parts that are no longer current, and indicate what elements of the research are expected to be covered during the period for which support is desired. A description of any significant findings since the most recent progress report should be included. The renewal proposal should treat, in reasonable detail, the plans for the next period, contain a cost estimate, and otherwise adhere to these instructions.

b. NASA may renew an effort either through amendment of an existing contract or by a new award.

## **9. Length**

Unless otherwise specified in the NRA, effort should be made to keep proposals as brief as possible, concentrating on substantive material. Few proposals need exceed 15-20 pages. Necessary detailed information, such as reprints, should be included as attachments. A complete set of attachments is necessary for each copy of the proposal. As proposals are not returned, avoid use of "one-of-a-kind" attachments: their availability may be mentioned in the proposal.

## **10. Joint Proposals**

a. Where multiple organizations are involved, the proposal may be submitted by only one of them. It should clearly describe the role to be played by the other organizations and indicate the legal and managerial arrangements contemplated. In other instances, simultaneous submission of related proposals from each organization might be appropriate, in which case parallel awards would be made.

b. Where a project of a cooperative nature with NASA is contemplated, describe the contributions expected from any participating NASA investigator and agency facilities or equipment which may be required. The proposal must be confined only to that which the proposing organization can commit itself. "Joint" proposals which specify the internal arrangements NASA will actually make are not acceptable as a means of establishing an agency commitment.

## **11. Late Proposals**

A proposal or modification received after the date or dates specified in an NRA may be considered if the selecting official deems it to offer NASA a significant technical advantage or cost reduction.

## **12. Withdrawal**

Proposals may be withdrawn by the proposer at any time. Offerors are requested to notify NASA if the proposal is funded by another organization or of other changed circumstances which dictate termination of evaluation.

## **13. Evaluation Factors**

a. Unless otherwise specified in the NRA, the principal elements (of approximately equal weight) considered in evaluating a proposal are its relevance to NASA's objectives, intrinsic merit, and cost.

b. Evaluation of a proposal's relevance to NASA's objectives includes the consideration of the potential contribution of the effort to NASA's mission.

c. Evaluation of its intrinsic merit includes the consideration of the following factors, none of which is more important than any other:

(1) Overall scientific or technical merit of the proposal or unique and innovative methods, approaches, or concepts demonstrated by the proposal.

(2) Offeror's capabilities, related experience, facilities, techniques, or unique combinations of these which are integral factors for achieving the proposal objectives.

(3) The qualifications, capabilities, and experience of the proposed principal investigator, team leader, or key personnel critical in achieving the proposal objectives.

(4) Overall standing among similar proposals and/or evaluation against the state-of-the-art.

d. Evaluation of the cost of a proposed effort includes the realism and reasonableness of the proposed cost and available funds.

## **14. Evaluation Techniques**

Selection decisions will be made following peer and/or scientific review of the proposals. Several evaluation techniques are regularly used within NASA. In all cases proposals are subject to scientific review by discipline specialists in the area of the proposal. Some proposals are reviewed entirely in-house, others are evaluated by a combination of in-house and selected external reviewers, while yet others are subject to the full external peer review technique (with due regard for conflict-of-interest and protection of proposal information), such as by mail or through assembled panels. The final decisions are made by a NASA selecting official. A proposal which is scientifically and programmatically meritorious, but not selected for award



during its initial review, may be included in subsequent reviews unless the proposer requests otherwise.

## **15. Selection for Award**

a. When a proposal is not selected for award, and the proposer has indicated that the proposal is not to be held for subsequent reviews, the proposer will be notified. NASA will explain generally why the proposal was not selected. Proposers desiring additional information may contact the selecting official who will arrange a debriefing.

b. When a proposal is selected for award, negotiation and award will be handled by the procurement office in the funding installation. The proposal is used as the basis for negotiation. The contracting officer may request certain business data and may forward a model contract and other information which will be of use during the contract negotiation.

## **16. Cancellation of NRA**

NASA reserves the right to make no awards under this NRA and to cancel this NRA. NASA assumes no liability for cancelling the NRA or for anyone's failure to receive actual notice of cancellation. Cancellation may be followed by issuance and synopsis of a revised NRA, since amendment of an NRA is normally not permitted.

**OSS EDUCATION AND OUTREACH BROKER/FACILITATOR PROGRAM  
- 1997 -**

**PROPOSAL PREFATORY MATERIALS**

• NOTICE OF INTENT TO PROPOSE	21
• PROPOSAL COVER SHEET	22
• PROPOSAL SUMMARY	23
• PROPOSAL BUDGET SUMMARY (INCLUDING INSTRUCTIONS)	24-26
• CURRENT AND PENDING RESEARCH SUPPORT	27
• CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS	28
• CERTIFICATION REGARDING DRUG-FREE WORKPLACE REQUIREMENTS	29
• CERTIFICATION REGARDING LOBBYING	30

<p>Note: All forms in this Appendix except for the three <u>Certifications</u> (pp.28-30) may be retyped at the proposer's discretion as long as they retain reasonable fidelity to those provided herein and all information indicated is provided in the order shown.</p>
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**NOTICE OF INTENT TO PROPOSE**

**OSS EDUCATION AND OUTREACH BROKER/FACILITATOR PROGRAM  
- 1997 -**

**DESCRIPTIVE TITLE OF INVESTIGATION:**

**PRINCIPAL INVESTIGATOR:**

Name/Title  
Institutional address  
Telephone, fax number and E-mail address  
Signature/Date

**AUTHORIZING INSTITUTIONAL REPRESENTATIVE:**

Name/Title  
Institutional address  
Telephone  
Signature/Date

**CO-INVESTIGATOR(S):** (to extent known by NOI deadline)  
Name(s) and institutional addresses(s)

**STATEMENT OF OBJECTIVES OF PROPOSED PROGRAM:**  
(not to exceed approximately one half page)

**PROPOSAL COVER SHEET**

(use additional pages as required)

OSS EDUCATION AND OUTREACH BROKER/FACILITATOR PROGRAM

- 1997 -

CATEGORIES OF ACTIVITIES TO BE UNDERTAKEN BY BROKER/FACILITATOR:

(e.g., training, liaison with science museums and/or planetariums, product creation, materials archiving and distribution, etc.)

GEOGRAPHIC AREA OF ACTIVITY: Cities, States, or Regions

DESCRIPTIVE TITLE OF INVESTIGATION:

PRINCIPAL INVESTIGATOR:

Name/Title

Institutional address

Telephone, fax number, and E-mail address

Signature/Date

PROPOSING INSTITUTION AUTHORIZATION: Name/Title

Institutional address

Telephone

Signature/Date

CO-INVESTIGATOR(S): (if any)

Name(s)

Institutional addresses(s)

BUDGET SUMMARY:

FY 1998      \$\_\_\_\_ K

FY 1999      \$\_\_\_\_ K

FY 2000      \$\_\_\_\_ K

TOTAL:      \$\_\_\_\_ K

## **PROPOSAL SUMMARY**

OSS EDUCATION AND OUTREACH BROKER/FACILITATOR PROGRAM  
- 1997 -

DESCRIPTIVE TITLE OF INVESTIGATION: (same title as on Cover Sheet)

PRINCIPAL INVESTIGATOR / INSTITUTION:

SUMMARY OF PROPOSED BROKER/FACILITATOR PROGRAM:

(Proposal summary should not exceed the remainder of this page and may also serve as the abstract of the proposal.)

## PROPOSAL BUDGET SUMMARY

### OSS EDUCATION AND OUTREACH BROKER/FACILITATOR PROGRAM

- 1997 -

FROM: \_\_\_\_\_ (starting date) to \_\_\_\_\_ (ending date) \_\_\_\_\_

TITLE OF INVESTIGATION:

PRINCIPAL INVESTIGATOR / INSTITUTION:

	A	<u>NASA USE ONLY</u>	
		B	C
1. Direct Labor (salaries, wages, and fringe benefits)	_____	_____	_____
2. Other Direct Costs:			
a. Subcontracts	_____	_____	_____
b. Consultants	_____	_____	_____
c. Equipment	_____	_____	_____
d. Supplies	_____	_____	_____
e. Travel	_____	_____	_____
f. Other	_____	_____	_____
3. Indirect Costs	_____	_____	_____
4. Other Applicable Costs	_____	_____	_____
5. Subtotal--Estimated Costs	_____	_____	_____
6. Less Proposed Cost Sharing	_____	_____	_____
7. Carryover Funds (if any)			
a. Anticipated amount	_____	_____	_____
b. Amount used to reduce budget	_____	_____	_____
8. Total Estimated Costs	_____	_____	XXXXXXXXXX
APPROVED BUDGET	XXXXXXXXXX	XXXXXXXXXX	_____

#### Instructions

1. Provide a separate Budget Summary sheet for each year of the proposal research.
2. Grantee estimated costs should be entered in Column A. Columns B and C are for NASA use only. Column C represents the approved grant budget.
3. Provide in attachments to the budget summary the detailed computations of estimates in each category, along with any narrative explanation required to fully explain proposed costs.

----- ADDITIONAL INSTRUCTIONS ON FOLLOWING PAGE -----

## **INSTRUCTIONS FOR BUDGET SUMMARY**

1. Direct Labor (salaries, wages and fringe benefits). Enclosures should list number and titles of personnel, amount of time devoted to the grant, and rates of pay.
2. Other Direct Costs.
  - a. Subcontracts - Enclosures should describe the work to be subcontracted, estimated amount, recipient (if known), and the reason for subcontracting this effort.
  - b. Consultants - Identify consultants to be used, why they are necessary, time to be spent on the project, and rates of pay.
  - c. Equipment - List separately and explain the need for items of equipment exceeding \$1,000. Describe the basis for the estimated cost.
  - d. Supplies - Provide general categories of needed supplies, the method of acquisition, estimated cost, and the basis for the estimate.
  - e. Travel - List the proposed trips individually, describe their purpose in relation to the grant, provide dates and destinations where known, and explain how the cost for each was derived.
  - f. Other - Enter the total of any other direct costs not covered by 2.a through 2.e. Enclose an itemized list explaining the need for each item and the basis for the estimate.
3. Indirect Costs. Identify indirect cost rate(s) and base(s) as approved by the cognizant Federal agency, including the effective period of the rate. If unapproved rates are used, explain why and include a computational basis for the indirect expense pool and corresponding allocation base for each rate.
4. Other Applicable Costs. Enter the total of any other applicable costs not covered by instructions 1 through 3. Enclose an itemized list explaining the need for each item and the basis for the estimate.
5. Subtotal -- Estimated Costs. Enter the sum of items 1, 2.a through 2.f, 3, and 4.
6. Less Proposed Cost Sharing (if any). Enter the amount proposed, if any. If cost sharing is based on specific cost items, identify each item and amount in enclosures.
7. Carryover Funds (if any). Enter the dollar amount of any funds that are expected to be available for carryover from the prior budget period.
8. Total Estimated Costs. Enter the total after subtracting items 6 and 7 from item 5.



## **CURRENT AND PENDING RESEARCH SUPPORT**

### **OSS EDUCATION AND OUTREACH BROKER/FACILITATOR PROGRAM**

- 1997 -

1. For the Principal Investigator and each Co-Investigator, provide separately for categories A and B the following information:

- Project title and sentence abstract
- Source of support
- Award amount and period covered by award
- Work-year commitment of the proposed Investigator.

A. Currently supported research project(s) that will be active during FY 1997 (October 1, 1996, through September 30, 1997) and FY 1998 (October 1, 1997, through September 30, 1998).

B. Research project(s) for which support is pending selection (including this proposal).

2. List the name of any other funding sponsor to which this proposal has been or will be contemporaneously submitted, including relevant dates.

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**CERTIFICATION REGARDING  
DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS  
PRIMARY COVERED TRANSACTIONS**

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This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, Section 85.510, Participant's responsibilities. The regulations were published as Part VII of the May 26, 1988 Federal Register (pages 19160-19211). Copies of the regulations may be obtained by contacting the U. S. Department of Education, Grants and Contracts Service, 400 Maryland Avenue, S. W. (Room 3633 GSA Regional Office Building No. 3), Washington, D. C. 20202-4725, telephone (202) 732-2505.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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Institution

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Principal Investigator

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Name and Title of Authorized Representative

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Signature

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Date

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**CERTIFICATION REGARDING DRUG-FREE WORKPLACE REQUIREMENTS  
GRANTEES OTHER THAN INDIVIDUALS**

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This certification is required by the regulations implementing the Drug-Free Workplace Act of 1988, 34 CFR Part 85, Subpart F. The regulations, published in the January 31, 1989 Federal Register, require certification by grantees, prior to award, that they will maintain a drug-free workplace. The certification set out below is a material representation of fact upon which reliance will be placed when the agency determines to award the grant. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of grants, or government wide suspension or debarment (see 34 CFR Part 85, Sections 85.615 and 85.620).

**The grantee certifies that it will provide a drug-free workplace by:**

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing a drug-free awareness program to inform employees about—
  - (1) The dangers of drug abuse in the workplace;
  - (2) The grantee's policy of maintaining a drug-free workplace;
  - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
  - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will—
  - (1) Abide by the terms of the statement; and
  - (2) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction;
- (e) Notifying the agency within ten days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction;
- (f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted—
  - (1) Taking appropriate personnel action against such an employee, up to and including termination; or
  - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

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Institution

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Principal Investigator

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Name and Title of Authorized Representative

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Signature

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Date

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### CERTIFICATION REGARDING LOBBYING

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As required by S1352 Title 31 of the U.S. Code for persons entering into a grant or cooperative agreement over \$100,000, the applicant certifies that:

- (a) No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, in connection with making of any Federal grant, the entering into of any cooperative, and the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement;
- (b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting an officer or employee of any agency, Member of Congress, an or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete Standard Form -LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subgrants, contracts under grants and cooperative agreements, and subcontracts), and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by S1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

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Organization Name

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AO or NRA Number and Name

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Printed Name and Title of Authorized Representative

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Signature

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Date

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Printed Principal Investigator Name

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Proposal Title